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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,310	08/21/2001	G. David Jang	S63.2-10078	8078

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VIDAS, ARRETT & STEINKRAUS, P.A.
6109 BLUE CIRCLE DRIVE
SUITE 2000
MINNETONKA, MN 55343-9185

EXAMINER

PREBILIC, PAUL B

ART UNIT	PAPER NUMBER
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3738

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DATE MAILED: 05/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/934,310

Applicant(s)

JANG, G. DAVID

Examiner

Paul B. Prebille

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34,35,37-40,42-45 and 47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 34,35,37-40,42-45 and 47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Claim Objections

Claims 34, 35, 37 and 42-45 are objected to because of the following informalities:

With regard to claims 34, 35, 37, and 42-45, the language of the claim is unclear because it states that the stent has a tapered configuration in the expanded state. Since only "each annual element" can have an expanded state, the expanded state of the stent lacks antecedent basis.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 39 and 40 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no clear original teaching for the stent diameter that "continuously increases from a first diameter at the first end to a second diameter at the second end" as claimed. Rather only a gradual or continual increase in diameter is disclosed along part of the length; see Figure 5 and pages 15 and 16 of the specification. This is due to the fact that the struts and the diameters they

produce vary along the length at finite distances, and because the specification only shows an increase along 7 of the 10 annual elements.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 34, 35, 37, 42-44, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al (US 6,348,065) in view of Pinchuk (US 5,575,818). Brown discloses a stent made from a single piece of material (see column 3, lines 13-17) having ends with different flexibilities than the middle portions (Figure 4 and column 3, line 47 to column 4, line 3), but Brown fails to disclose first and second ends with different flexibilities. The tapered configuration as claimed is between the portions (19a) and struts (18) which are thinner as compared thereto.

As to the limitation requiring that the stent be cut from a tube, it is the Examiner posits that Brown discloses the same structure even though Brown uses a different method of making the same device. In particular, Brown cuts a flat piece of material and then forms the cut material into a tube with welds; see column 2, lines 56-64. This process would result in the same structure as stent cut from a tube as claimed. Alternatively, the resulting structure of Brown would be substantially identical to that claimed such that it would be clearly obvious in view thereof; see MPEP 2113 which is incorporated herein by reference thereto.

However, Pinchuk teaches that it was known to make similar stents with ends having different degrees of flexibility; see Figures 4, 5, and 7 as well as column 4, lines 24-65. Therefore, it would have been obvious to make the ends of the Brown stent with different flexibilities for the same reasons that Pinchuk does the same and in order to fit the stent to a long section of blood vessel that tapers to a smaller diameter therealong.

Claims 34, 35, 37, 39, 40, 42-45, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindenberg et al (US 5,716,393) in view of Pinchuk (US 5,575,818). Lindenberg discloses a stent made from a single flat piece of material (see column 3, lines 34-51) having ends with different flexibilities than the middle portions (Figures 2 and 3 as well as and column 3, line 26 to column 4, line 30), but Lindenberg fails to disclose first and second ends with different flexibilities. The tapered configuration as claimed is at both ends; see Figure 2.

As to the limitation requiring that the stent be cut from a tube, it is the Examiner posits that Lindenberg discloses the same structure even though Lindenberg uses a different method of making the same device. In particular, Lindenberg cuts a flat piece of material and then forms the cut material into a tube with welds; see column 3, lines 34-51. This process would result in the same structure as stent cut from a tube as claimed. Alternatively, the resulting structure of Lindenberg would be substantially identical to that claimed such that it would be clearly obvious in view thereof; see MPEP 2113 which is incorporated herein by reference thereto.

However, Pinchuk teaches that it was known to make similar stents with ends having different degrees of flexibility; see Figures 4, 5, and 7 as well as column 4, lines

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24-65. Therefore, it would have been obvious to make the ends of the Lindenberg stent with different flexibilities for the same reasons that Pinchuk does the same and in order to fit the stent to a long section of blood vessel that tapers to a smaller diameter therealong.

With regard to claims 39, 40, and 45, Lindenberg teaches varying the diameter continuously from the middle portion, but not varying the diameter from smaller to larger from one end to the other as claimed. However, Pinchuk teaches the concept of having ends with different diameters; see *supra*. Therefore, it is the Examiner's position that it would have been prima facie obvious to vary the diameter from a smaller one to the larger one in Lindenberg for the same reasons as Pinchuk and in order to better fit a tapering blood vessel.

Response to Arguments

The Applicant's argue that the Examiner does not interpret taper in the same manner it is used in Roubin. In response, the Examiner posits that the claims fail to distinguish from the Examiner's interpretation of the Brown disclosure. One would have to read limitations into the claims in order to understand them as the Applicants would want them understood. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lau et al (US 6,689,159) is cited because it teaches that making stents cut from tubes was known at the time the present invention was made; see Figure 6 and column 6, line 37 to column 7, line 35.

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Applicant should specifically point out the support for any amendments made to the disclosure, including the claims (MPEP 714.02 and 2163.06). Due to the procedure outlined in MPEP 2163.06 for interpreting claims, it is noted that other art may be applicable under 35 USC 102 or 35 USC 103(a) once the aforementioned issue(s) is/are addressed.

Applicant is respectfully requested to provide a list of all copending applications that set forth similar subject matter to the present claims. A copy of such copending claims is respectfully requested in response to this Office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Prebilic whose telephone number is (703) 308-2905. The examiner can normally be reached on Monday-Thursday from 6:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott, can be reached on (703) 308-2111. The fax phone number for this Technology Center is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 3700 receptionist whose telephone number is (703) 308-0858.



Paul Prebilic
Primary Examiner
Art Unit 3738